April 81

# THE HARVARD NEWSLETTER ON COMPUTER GRAPHICS

*news/trends*
*insights*
*perspective*
*opportunities*

$125/yr Newsletter

**BECAUSE YOU . . .**

. . . are intimately involved with computers,

I would like you to get acquainted with *The Harvard Newsletter on Computer Graphics* by accepting my very special trial offer . . . and an opportunity to receive a valuable computer graphics directory to boot.

I make this offer because I know that this Harvard Newsletter can help you to take advantage of computer graphics—the computer industry's next multibillion dollar activity.

Indeed, as a recognized powerful tool and an increasingly economic way to display computer-generated business, engineering and scientific data, computer graphics is giving rise to another wave of professional and market opportunities.

And this, of course, can be vitally important to you— as one whose livelihood is also tied to computers. For example, consider how answers to the following questions would be helpful to you professionally as well as to your organization:

- What applications lend themselves to economic use of computer graphics? What about the availability of software and its quality? What are the considerations in using color computer graphics vs. black and white? What does this do to costs? What are my hard-copy options—at what costs?

- Computer graphics has a new breed of computer industry vendors, such as Megatek, ISSCO, Ramtek, Summagraphics, Evans & Sutherland, Computervision, and so on. Who's behind these companies? What are their product offerings and business goals?

- Large data bases are rapidly becoming economically amenable to analysis, interpretation, and presentation via computer graphics techniques. Who is doing what in this so-called computer mapping field? Is this something that I, or my organization, should get into?

- Both time sharing networks and computer service bureaus are stepping up their computer graphics capabilities. What are their offerings and what significance do these services hold for myself and my organization?

These are the kinds of questions that *The Harvard Newsletter on Computer Graphics* will answer . . . issue after issue . . . as it pursues one overriding goal: To keep you informed and up-to-date on computer graphics' economic, technological and product status, whether you be a computer graphics user, prospective user, or supplier.

In doing so, the Newsletter will report on . . . and probe . . . key product developments as well as R&D projects that promise a near-term payoff. Equally important, the Newsletter will cover application and market opportunities—with a particular emphasis on economics and costs to provide realistic appraisals.

Our editorial team (soon to be discussed) is uniquely prepared to provide such insight and perspective as well as spot news. Moreover, the information will be timely too! That's because *The Harvard Newsletter on Computer Graphics* is published twice-a-month, the only specialized computer graphics publication to be on such a fast-paced frequency.

In addition, the Newsletter will suggest where to go, or whom to contact, to receive further information on your personal questions and needs. A critical calendar of events will also be included to point out specialized conferences, exhibits, tutorials, seminars, and other important activities devoted to computer graphics.

Now let me take one moment to tell you about the team producing *The Harvard Newsletter on Computer Graphics* which, by the way, joins the *Harvard Business Review* and the *Harvard Medical Letter,* among other highly-regarded publications put out by Harvard University.

This latest of Harvard newsletters comes under the auspices of The Laboratory for Computer Graphics, whose experience in the field dates back 15 years. This period covers the most dynamic part of computer graphics history, especially today's critically important interactive applications, which originated with Ivan Sutherland's "Sketchpad" breakthrough in 1962. Also, I, as the Newsletter's publisher and editorial director, have some 15 years publications experience, including key editorial staff positions on *Machine Design, Business Week,* and *Mini-Micro Systems* magazines.

As a result of this unique publishing combination, you can expect that *The Harvard Newsletter on Computer Graphics* will provide indispensable reading. Indeed, I can assure you, by spending 10 to 15 minutes with each issue, you will acquire a valuable awareness of key developments that have transpired in the computer graphics field over each publishing cycle and that you will also gain an understanding of longer-term trends and issues as well.

Succinctly put, the Newsletter will aim to keep you on top of the computer graphics field in all of its myriad ramifications. And its coverage will be comprehensive, encompassing:

- Presentation and decision-making computer graphics.
- Computer graphics-aided design, drafting, engineering, and manufacturing.
- Computer graphics-aided art and film animation.
- Image processing and automated cartography.

...plus other related areas. Significant developments and trends will be monitored—whether applied to hardware or software, big or small computers, standalone terminals, timesharing networks, users, or vendors.

Of course, we want you to judge all of this for yourself, and the best way to do this is to read the Newsletter. Accept my invitation to receive a trial six month subscription (twelve issues) for only $75 (add $15 for subscriptions outside of North America).

Or, better yet, become an annual subscriber at the regular $125 rate and receive, not only 24 issues for 12 months, but also, as a bonus, "THE HARVARD DIRECTORY OF COMPUTER GRAPHICS SUPPLIERS: Hardware, Software, Systems, and Services." (Add $32 for overseas subscriptions.)

To subscribe, simply fill in the enclosed form and drop it in the mail. No need to pay now. We will bill you later.

Very truly yours,

Stanley Klein
*Publisher/Editorial Director*

*P.S. I am so certain that The Harvard Newsletter on Computer Graphics will be a valuable aid to you that I promise to return your subscription price – in full – if you are not completely satisfied after seeing a few issues.*

### PCM GRAPHICS SUPPLIERS FLOCK TO HEWLETT-PACKARD

Popularity among plug-compatible hardware manufacturers (PCMs) is one sure sign of a computer manufacturer's market dominance. In mainframes, IBM machines lead the PCM onslaught, of course. And in computer graphics, well, Hewlett-Packard is becoming a favorite PCM target. Here are the latest H-P attach-

### ENHANCEMENTS MADE TO MOVIE.BYU

Brigham Young University announces enhancements to its MOVIE. BYU software, a set of Fortran programs designed to facilitate display and manipulation of graphics mathematical models. (MOVIE. BYU

### A NEW CONTENDER IN PLOTTERS

Earlier this year, French pen plotter manufacturer, Benson, S.A., acquired Varian Associates' electrostatic printer/plotter graphics product line, and now the rationale behind the acquisition is unfolding. Benson holds a 50% market share in Europe with a product

### SIEMENS' APPROACH TO THE PAPERLESS OFFICE

Siemens AG in Munich, Germany, is taking a hard look at ways to integrate graphics and text into an electronic

### GERBER'S SALES/EARNINGS SOAR

High flying Gerber Scientific, Inc. continues to cut quite a swath in the computer graphics business. Reflecting the robust conditions in the ind-

### CDC THROWS ITS TIME/SHARING HAT IN THE CAD/CAM RING

Last October, Boeing Computer Services Co. declared that it had "set its sights on becoming the engineer's computer services company." At that time, Boeing introduced a library of 24 engineering design software packages for use on its timesharing network. So now, in a classic "Can you top this?" fashion, Control Data Corp. announces its intention "to become the leader in CAD/CAM," according to CDC Executive Vice President Robert W. Duncan. To back up the con-

### SIGGRAPH PROPOSED STANDARD IS REVISED

A revised draft of the proposed 1977 standard covering computer graphics application software has been

### 3-D DISPLAYS COME ON STRONG

3-D representation is another sticky wicket in CG applications; this function can match color hard co... its high cost, awkwardness, and general ... But now, in a move to redress these ... vendors have come up with ... Associates for its Graph... Corp. for its Whiz... 3-D functio... ware ... enab... mani... San... ordinat... to a tip by computer graphics consultant Carl Machover, White Plains, NY. Little known to most ...spects its model 5753 "co- ...space. ...ard- ... displays to ...d, and otherwise to find a market as an instructor

### A LOW-COST WAY TO BUY CG

Here is a nifty, low-cost way for IBM mainframe users to become acquainted with computer graphics, thanks

### LEXIDATA GETS A NEW LEASE ON LIFE

New people, new financing, and a new product at Burlington, (Mass.)-based Lexidata Corp. suggest the makings of a major computer graphics company. And that indeed is what "I want to put together," exclaims

### MORE BELLS AND WHISTLES FOR THE WHIZZARD

With yet an additional two new options, the Whizzard graphics terminal manufacturer, Megatek Corp. continues to mount an aggressive drive into the graphics marketplace. These capabilities are in addition to the 3-D capability also announced recently (page 1). The two new options are:

- A "Wand 1" graphics utility software package that

### CHINA PLAYING CATCH-UP IN CG?

Now that we are pals with the Chinese, can we expect to see them competing in world computer graphics

### COLOR HARD COPY: THE BARRIERS BEGIN TO FALL

Recent equipment introductions by four vendors now enable user choice in an area long seen as a stumbling block to the growth of computer graphics: quality color hard copy. The units, driven directly from CPUs, graphic terminals, or tape drives, produce a variety of formats—photographic prints, 35mm slides, transparencies, and plain paper copies. They also vary

### COMPUTER GRAPHICS VS. DATA COMMUNICATIONS

*The Harvard Newsletter* has turned up some startling —and welcome—statistics: Annual shipments of computer graphics systems by OEMs about equal shipments of data communication systems. This appears to be somewhat remarkable, considering the over-

THE HARVARD NEWSLETTER ON COMPUTER GRAPHICS
Harvard University/Laboratory for Computer Graphics
48 Quincy Street
Cambridge, Massachusetts 02138

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